Remarks

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and the following remarks. Claims 28-48 are pending in the application. Claims 28-33, 35-38, and 40-47 are rejected. No claims have been allowed. Claims 28, 35, and 40 are independent. Claims 34, 39, and 48 are cancelled. Claims 28, 32, 35, 37, 40, and 46 have been amended.

Claim Rejections under 35 U.S.C. § 101

The Action rejects claims 28-33, 35-38, and 40-47 under 35 U.S.C. § 101 as allegedly directed toward non-statutory subject matter. Applicants respectfully traverse this rejection.

Claims 28 and 35 each recite:

> *In a speech processing tool operated on a computing device*, a method comprising:
> using the computing device, *processing a frame for a speech signal, the frame representing audio samples taken from the speech signal*, . . .; and
> *outputting a result usable for playback of the speech signal.*

[Emphasis added.] Similarly, claim 49 recites:

> *In an audio processing tool operated on a computing device, a method comprising:*
> using the computing device, *processing encoded information for an audio signal, the encoded information representing audio samples taken from the speech signal*, . . .; and
> *outputting a result usable for playback of the speech signal.*

[Emphasis added.] Support for the amendments can be found a pages 1-5 of the Application, as well as Figure 1 and accompanying text.

Applicants believe that, with these amendments, the independent claims each are directed to patentable subject matter. The Action notes that "a statutory 'process' under 35 U.S.C. § 101 must (a) be tied to another statutory category (such as a manufacture or machine), or (b) transform underlying subject matter (such as an article or material to a different state or thing. Applicants respectfully argue that the independent claims recite methods which satisfy each of these conditions.

The test suggested in the Action comes from the *In Re Bilski* decision, recently decided by the Federal Circuit for determining subject matter eligibility under § 101. At pages 25-26 of *In Re Bilski*, the Federal Circuit indicated that the transformation test can be satisfied by process

claims relating to processing data representing physical world phenomena and outputting representations of the transformed data, stating:

> The raw materials of many information-age processes, however, are electronic signals and electronically-manipulated data. And some so-called business methods, such as that claimed in the present case, involve the manipulation of even more abstract constructs such as legal obligations, organizational relationships, and business risks. Which, if any, of these processes qualify as a transformation or reduction of an article into a different state or thing constituting patent-eligible subject matter?
>
> Our case law has taken a measured approach to this question, and we see no reason here to expand the boundaries of what constitutes patent-eligible transformations of articles.
>
> Our predecessor court's mixed result in Abele illustrates this point. There, we held unpatentable a broad independent claim reciting a process of graphically displaying variances of data from average values. Abele, 684 F.2d at 909. That claim did not specify any particular type or nature of data; nor did it specify how or from where the data was obtained or what the data represented. Id.; see also In re Meyer, 688 F.2d 2007-1130 25 789, 792-93 (CCPA 1982) (process claim involving undefined "complex system" and indeterminate "factors" drawn from unspecified "testing" not patent-eligible). In contrast, we held one of Abele's dependent claims to be drawn to patent-eligible subject matter where it specified that "said data is X-ray attenuation data produced in a two dimensional field by a computed tomography scanner." Abele, 684 F.2d at 908-09. This data clearly represented physical and tangible objects, namely the structure of bones, organs, and other body tissues. Thus, the transformation of that raw data into a particular visual depiction of a physical object on a display was sufficient to render that more narrowly-claimed process patent-eligible.
>
> *We further note for clarity that the electronic transformation of the data itself into a visual depiction in Abele was sufficient*; the claim was not required to involve any transformation of the underlying physical object that the data represented. We believe this is faithful to the concern the Supreme Court articulated as the basis for the machine-or-transformation test, namely the prevention of pre-emption of fundamental principles. So long as the claimed process is limited to a practical application of a fundamental principle to transform specific data, and the claim is limited to a visual depiction that represents specific physical objects or substances, there is no danger that the scope of the claim would wholly pre-empt all uses of the principle.

[Emphasis added.] As remarked by the Federal Circuit in the above quoted discussion, the transformation test does not require any transformation of the underlying physical object that the data represented. The transformation test is satisfied when the data represents the physical world, and a visual depiction of the transformed data is produced.

Unlike the first, *non-statutory*, Abele claim, the present claims do specify the particular type and nature of data, and how the data is obtained. Instead, closely analogous to the "X-ray attenuation data" and "graphical depiction" of the *statutory* Abele claim, claims 28-33, 35-38, and 40-47 also are drawn to transforming data representing physical world phenomena, and representation of the transformed data. Applicant's claims transform data representing audio samples of speech, and produce a audio playback of the represented speech. As per the Federal Circuit's interpretation of the transformation test in its In Re Bilski decision, these claims therefore meet the transformation test.

In addition, Applicants respectfully submit that claims 28-33, 35-38, and 40-47 also meet the particular machine test. The claims recite that the "audio processing tools" which perform the claimed methods are "operated on a device comprising a computer processor." As such these claims are drawn to operation of a particular machine, which is patent eligible subject matter per the particular machine test under the Federal Circuit's *In Re Bilski* decision.

For these reasons, Applicants respectfully submit that the claims recite patent eligible subject matter. The § 101 rejection should be withdrawn.

Conclusion

The Action notes that claims 28-33, 35-38, and 40-47 are allowable over the cited art. As Applicants have demonstrated that claims 28-33, 35-38, and 40-47 as amended are directed to statutory subject matter, the claims in their present form should be allowable. Such action is respectfully requested.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 595-5300
Facsimile: (503) 595-5301

By 
Stephen A. Wight
Registration No. 37,759